

CLAIMS

1. (Currently Amended) In an appliance with a relatively stationary ~~component~~ cabinet and a rotatable vessel for holding a supply of material, a method comprising:

charging the vessel with the supply of material;

rotating the vessel about an axis;

5 causing the vessel to engage the relatively stationary ~~component~~ cabinet by rapidly accelerating the rotation of the vessel;

[determining] measuring an amount of energy with which the vessel has engaged the relatively stationary ~~component~~ cabinet following a start of the rapid acceleration;

comparing the amount of energy with a predetermined value; and

10 sending a signal indicative of an unbalance condition if the amount of energy exceeds the predetermined value.

2. (Previously Presented) The method of claim 1, wherein the appliance is an automatic washing machine.

3. (Previously Presented) The method of claim 2, wherein the washing machine is a vertical axis washer.

4. (Previously Presented) The method of claim 2, wherein the washing machine is a horizontal axis washer.

5. (Previously Presented) The method of claim 1, wherein the appliance is a clothes treating appliance and the material comprises a fabric load.

6. (Canceled)

7. (Previously Presented) The method of claim 1, wherein the step of determining an amount of energy comprises rotating the vessel with an electric motor, measuring a current supplied to the motor, isolating a frequency of the current relating to the engagement of the vessel with the relatively stationary component and generating a curve representing the frequency, comparing the frequency with a curve representing a reference motor current, integrating areas above the reference curve within the engagement curve, and accumulating the areas for a predetermined time.

8. (Previously Presented) The method of claim 7, wherein the step of comparing comprises comparing the accumulated area value with a predetermined threshold value.

9. (Currently Amended) An appliance comprising:

a vessel mounted for rotation about an axis, configured to receive a supply of material and arranged relative to a relatively stationary ~~part~~ cabinet of the appliance whereby the vessel is configured to engage the relatively stationary ~~part~~ cabinet in a severe unbalance loading condition of the material in the vessel while the vessel is rotating;

a control arranged and configured to rapidly accelerate a rotation of the vessel causing the vessel to engage the stationary ~~part~~ cabinet, ~~determine~~ measure an amount of energy with which the vessel has engaged the relatively stationary ~~part~~ cabinet, compare the amount of energy with a predetermined value, and send a signal indicative of an unbalance condition if the amount of energy exceeds the predetermined value.

10. (Previously Presented) An appliance according to claim 9, wherein the appliance is an automatic washing machine.

11. (Previously Presented) An appliance according to claim 10, wherein the washing machine is a vertical axis washer.

12. (Previously Presented) An appliance according to claim 10, wherein the washing machine is a horizontal axis washer.

13. (Previously Presented) An appliance according to claim 9, wherein the appliance is a clothes treating appliance and the material comprises a fabric load.

14. (Canceled)

15. (Previously Presented) An appliance according to claim 9, including an electric motor drivingly connected to the rotatable vessel.

16. (Previously Presented) An appliance according to claim 15, wherein the electric
5 motor comprises a controlled induction motor and an inverter is provided in the control connected to the motor, the control further comprising a current measuring device connected to a dc bus of the inverter.

17. (Previously Presented) An appliance according to claim 16, wherein the current
measuring device provides an output signal representative of the current used by the motor, the
control further including a digital filter connected to receive the output signal, the digital filter
including a running average algorithm and providing an output representative of an average
5 current used by the motor.

18. (Previously Presented) An appliance according to claim 9, wherein the signal comprises one of an audible and visible signal to a user.

19. (Previously Presented) An appliance according to claim 9, wherein the signal comprises an electrical signal transmitted to a further part of the control.

20. (Currently Amended) An appliance having a rotatable vessel configured to receive a supply of material mounted within a relatively stationary housing, the vessel rotatable about an axis and the vessel being mounted in a fashion such that it is movable relative to the housing in a direction perpendicular to the axis, comprising:

5 an electrical motor drivingly connected to the rotatable vessel,

a control operatively connected to the motor and configured to rapidly accelerate a rotation of the vessel through operation of the motor causing the vessel to engage the relatively stationary housing, ~~determine~~ measure an amount of energy with which the vessel has engaged the relatively stationary housing as reflected by a characteristic of electrical current drawn by the
10 motor, compare the amount of energy with a predetermined value, and send a signal indicative of an unbalance condition if the amount of energy exceeds the predetermined value.

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REMARKS